Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method adapted to an optical storage device for writing data to an optical storage medium, the optical storage device having a memory and a pickup, the memory storing a predetermined plurality of different sets of write strategy parameters, the method comprising:

providing an RLL modulation waveform to the optical storage device, the RLL modulation waveform including a previous land section, a current pit section, and a next land section;

choosing a set of write strategy parameters from the plurality of sets of write strategy parameters stored in the memory according to waveform lengths of the previous land section, the current pit section, and the next land section;

generating a write time waveform according to the chosen set of write strategy parameters; and

driving the pickup with the write time waveform, so as to write data corresponding to the RLL modulation waveform to the optical storage medium.

2. (original) The method of claim 1 wherein the RLL modulation waveform has a base period, the method further comprising:

setting the write time waveform to an erase power state before the optical storage device writes data; and

setting the write time waveform to a bias power state and inserting a plurality of pulses into the write time waveform when the optical storage device writes data, and each pulse switching the write time waveform from the bias power state to a write power state.

3. (currently amended) The method of claim 2 wherein the write strategy parameters include a plurality of first parameters and a plurality of second parameters, each of the first parameter representing a delay from a leading edge of the current pit section to a leading edge of a first pulse of the write time waveform, each of the second parameter representing a delay from a trailing edge of the first pulse of the write time waveform to a leading edge of ~~the next pulse of the first pulse~~ a second pulse of the write time waveform, the method further comprising:
choosing a first parameter from the plurality of first parameters according to waveform lengths of the previous land section and/or the current pit section; and
choosing a second parameter from the plurality of second parameters according to waveform lengths of the previous land section and/or the current pit section.

4. (currently amended) The method of claim 3 wherein a trailing edge of the first pulse of the write time waveform is ~~in alignment with a position of a leading edge of the current pit section or~~ in alignment with a position twice the base period posterior to a leading edge of the current pit section.

5. (original) The method of claim 3 wherein a length of the first pulse of the write time waveform is equal to a length of twice the base period subtracting the chosen first parameter.

6. (original) The method of claim 2 wherein the write strategy parameters include a plurality of sets of repeating pulse parameters, each set of repeating pulse parameters having a plurality of repeating pulse parameters, the repeating pulse parameters representing pulse lengths of all but the first and the last pulses, a length between leading edges of any two consecutive pulses among all but the first and the last pulses being equal to twice the length of the base period, the method further comprising:
choosing a set of repeating pulse parameters from the sets of repeating pulse parameters according to a waveform length of the current pit section.

7. (original) The method of claim 6 wherein the repeating pulse parameters in the

same set of repeating pulse parameters are equal to one another.

8. (original) The method of claim 6 wherein the repeating pulse parameters in the same set of repeating pulse parameters are not necessarily equal to one another.

9. (previously presented) The method of claim 2 wherein the write strategy parameters include a plurality of third parameters, a plurality of fourth parameters, and a plurality of fifth parameters, each third parameter representing a delay from a position twice the base period prior to a trailing edge of the current pit section to a leading edge of a last pulse of the write time waveform, each fourth parameter representing a period of the last pulse of the write time pulse, each fifth parameter representing a delay from a position one base period prior to the trailing edge of the current pit section to a position the write time waveform switches back to the erase power state, the method further comprising:

choosing a third parameter from the plurality of third parameters according to waveform
lengths of the current pit section and the next land section;
choosing a fourth parameter from the plurality of fourth parameters according to the waveform length of the current pit section; and
choosing a fifth parameter from the plurality of fifth parameters according to the waveform lengths of the current pit section and the next land section.

10. (previously presented) The method of claim 9 wherein a delay from a trailing edge of the last pulse of the write time waveform to a position the write time waveform switches back to the erase power state is equal to the chosen fifth parameter plus a duration of one base period subtracting the chosen third parameter subtracting the chosen fourth parameter.

11. (previously presented) The method of claim 2 wherein a delay from a trailing edge of any but the first and the last pulses in the write time waveform to a leading edge of the next pulse is equal to a duration twice the base period subtracting a length

of the pulse.

12. (original) The method of claim 2 wherein waveform lengths of the previous land section, the current pit section, and the next land section are all multiples of the base period, ranging from three times the base period to eleven times the base period.

13. (original) The method of claim 2 wherein levels of the erase power state, the bias power state, and the write power state are predetermined values, and do not vary with different RLL modulation waveforms.

14. (original) The method of claim 1 being adapted to a CD burner.

15. (original) The method of claim 14 being capable of writing data onto a CD-RW.

16. (original) The method of claim 1 being adapted to a DVD burner.

17. (original) The method of claim 16 being capable of writing data onto a DVD-R.

18. (original) The method of claim 16 being capable of writing data onto a DVD-RW.

19. (original) The method of claim 1 wherein the RLL modulation waveform is an eight-to-fourteen modulation waveform.

20. (new) The method of claim 3 wherein a trailing edge of the first pulse of the write time waveform is in alignment with a position of a leading edge of the current pit section.

21. (new) A method adapted to an optical storage device for writing data to an optical storage medium, the optical storage device having a memory and a pickup, the method comprising:

storing a predetermined plurality of different sets of write strategy parameters in the memory prior to receiving an RLL modulation waveform;

receiving the RLL modulation waveform, the RLL modulation waveform including a previous land section, a current pit section, and a next land section;

choosing a set of write strategy parameters from the plurality of sets of write strategy parameters stored in the memory according to waveform lengths of the previous land section, the current pit section, and the next land section;

generating a write time waveform according to the chosen set of write strategy parameters; and

driving the pickup with the write time waveform, so as to write data corresponding to the RLL modulation waveform to the optical storage medium.